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Amendments to the Claims:

A listing of the entire set of pending claims (including amendments to the claims, if any) is submitted herewith per 37 CFR 1.121. This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A system for multiplexed transmission of normal and robust digital video data, comprising:

a multiplexer switching between normal and robust data inputs;

one or more units <u>configured to randomize, format, interleave and encode</u> ~~randomizing, formatting, interleaving and encoding~~ data <u>output</u> from the multiplexer into <u>first</u> encoded data packets <u>associated with the normal data input and second encoded packets</u> <u>associated with the robust data input</u>; and

a <u>post-</u>processing unit <u>configured to deinterleave the first and second</u> ~~deinterleaving~~ encoded data packets produced by the one or more units, <u>further comprising the steps of:</u>

    <u>(a)</u> removing a trailing portion from each <u>of said first and second</u> encoded data packets ~~packet~~, and

    <u>(b)</u> derandomizing a remaining portion of each <u>of said first and second</u> encoded data <u>packets</u> ~~packet~~,

wherein <u>said step of</u> removing a trailing portion from each <u>of said first and second</u> encoded <u>data packets</u> ~~packet~~ includes <u>one of:</u>

    removing <u>reed-solomon</u> parity bytes <u>from said first encoded data packets, and</u> ~~when an encoded packet includes normal data supplied from the normal data input, and includes~~

    removing encoded digital information bytes <u>from said second encoded data</u> <u>packets,</u>~~when an encoded packet includes robust data from the robust data input~~

<u>wherein said reed-solomon parity bytes are different from said encoded digital</u> <u>information bytes.</u>

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2. (Original) The system according to claim 1, wherein the multiplexer, the one or more units, and the processing unit form a portion of an enhanced vestigial sideband (VSB) encoder, the one or more units further comprising a data randomizer, a Reed Solomon encoder, an interleaver and packet formatter, a main interleaver and a trellis encoder each operating in sequence on data from the multiplexer to generate the encoded data packets.

3. (Original) The system according to claim 2, further comprising: a parity byte generator operating in conjunction with the trellis encoder to generate parity bytes for normal data switched by the multiplexer.

4. (Original) The system according to claim 1, wherein the processing unit removes the trailing portion equal to a number of bytes required to form Motion Picture Expert Group (MPEG) compliant packets.

5. (Canceled)

6. (Original) The system according to claim 1, wherein the processing unit further comprises:
        a bit-to-byte converter and trellis deinterleaver and a main deinterleaver operating sequentially on data packets received from the one or more units; and
        a derandomizer operating on data packets after removal of the trailing portion.

7. (Original) The system according to claim 2, wherein the processing unit forwards packets generated by the enhanced vestigial sideband encoder to a standard vestigial sideband modulator.

8. (Original) The system according to claim 7, wherein the standard vestigial sideband modulator further comprises:
        a data randomizer, a Reed Solomon encoder, an interleaver and a trellis encoder operating sequentially on data packets received from the enhanced vestigial sideband encoder;

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a multiplexer switching data packets generated by the standard vestigial sideband modulator with synchronization signals; and

an antenna transmitting signals corresponding to the switched data packets and synchronization signals.

9. (Original) A wireless transmission system including the system according to claim 8, the wireless transmitter further comprising: a data link coupling the enhanced vestigial sideband encoder and the standard vestigial sideband modulator, wherein the antenna transmits the signals over a wireless communications channel to a receiver.

10. (Original) The wireless transmission system according to claim 9, wherein the enhanced vestigial sideband encoder is implemented within a studio and the standard vestigial sideband modulator is implemented with a transmitter.

11. (Currently Amended) A method of employing a transmission system to perform multiplexed transmission of normal and robust digital video data, comprising:

switching between normal and robust data inputs via a multiplexer of the transmission system;

randomizing, formatting, interleaving and encoding data from the normal and robust data inputs into encoded first data packets associated with the normal data input and second data packets associated with the robust data input, via a data randomizer, a packet formatter, an interleaver and an encoder of the transmission system; and

processing the encoded first and second data packets by deinterleaving the encoded data packets via a post-processor of the transmission system, including the steps of:[[,]]

        (a) removing a trailing portion from each of said first and second encoded data packets [[packet]], and

        (b) derandomizing a remaining portion of each of said first and second encoded data packets [[packet]] via a post-processor of the transmission system,

wherein said step of removing a trailing portion from each of said first and second encoded data packets [[packet]] includes one of:

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removing <u>reed-solomon</u> parity bytes <u>from said first encoded data packets, and</u> when an encoded packet includes normal data supplied from the normal data input, ~~and~~ ~~includes~~ removing encoded digital information bytes <u>from said second</u> <u>encoded data packets</u> ~~when an encoded packet includes robust data from the robust data input~~ <u>wherein said reed-solomon parity bytes are different from said encoded digital</u> <u>information bytes</u>.

12. (Previously Presented) The method according to claim 11, wherein the switching, randomizing and processing are performed within a portion of an enhanced vestigial sideband (VSB) encoder including the data randomizer, a Reed Solomon encoder, the interleaver and the packet formatter, a main interleaver and a trellis encoder each operating in sequence on data from the normal and robust data inputs to generate the encoded data packets.

13. (Previously Presented) The method according to claim 12, further comprising:
generating parity bytes for normal data switched from the normal data inputs via a parity byte generator of the transmission system.

14. (Previously Presented) The method according to claim 11, further comprising:
removing the trailing portion equal to a number of bytes required to form Motion Picture Expert Group (MPEG) compliant packets via the post-processor of the transmission system.

15. (Canceled)

16. (Previously Presented) The method according to claim 11, wherein processing the encoded data packets comprises:
bit-to-byte converting and trellis deinterleaving the encoded data packets via the post-processor of the transmission system; and
derandomizing the encoded data packets after removal of the trailing portion via the post-processor of the transmission system.

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17. (Original) The method according to claim 12, further comprising:

forwarding packets generated by the enhanced vestigial sideband encoder to a standard vestigial sideband modulator.

18. (Original) The method according to claim 17, further comprising:

randomizing, Reed Solomon encoding, interleaving and trellis encoding data packets received at the standard vestigial sideband modulator from the enhanced vestigial sideband encoder;

switching data packets generated by the standard vestigial sideband modulator with synchronization signals; and

transmitting signals corresponding to the switched data packets and synchronization signals.

19. (Currently Amended) A system for multiplexed transmission of normal and robust digital video data, comprising:

(I)   an enhanced vestigial sideband (VSB) encoder having normal and robust data inputs and including:

a multiplexer switching between the normal and robust data inputs;

a data randomizer, a Reed Solomon encoder, an interleaver and packet formatter, a main interleaver and a trellis encoder each operating in sequence on data from the multiplexer to randomize, format, interleave and encode data from the multiplexer and generate the first encoded data packets associated with the normal data input and second encoded data packets associated with the robust data input; and

a post-processing unit configured to deinterleave the first and second encoded data packets deinterleaving encoded data packets produced by the data randomizer, Reed Solomon encoder, interleaver and packet formatter, main interleaver and trellis encoder, wherein said deinterleaving comprises:

(a) removing a trailing portion from each of said first and second encoded data packets packet, and

(b) derandomizing a remaining portion of each of said first and second encoded data packets packet,

wherein said step of removing a trailing portion from each of said first and second encoded data packets includes one of:

(i) removing reed-solomon parity bytes from said first encoded data packets,

(ii) removing encoded digital information bytes from said second encoded data packets,

wherein said reed-solomon parity bytes are different from said encoded digital information bytes.

~~removing a trailing portion from each encoded data packet, and derandomizing a remaining portion of each encoded data packet, wherein removing a trailing portion from each encoded packet includes removing parity bytes when an encoded packet includes normal data supplied from the normal data input, and includes removing encoded digital information bytes when an encoded packet includes robust data from the robust data input; and~~

(II)   a standard vestigial sideband modulator receiving data packets from the enhanced vestigial sideband encoder and including:

a data randomizer, a Reed Solomon encoder, an interleaver and a trellis encoder operating sequentially on data packets received from the enhanced vestigial sideband encoder;

a multiplexer switching data packets generated by the data randomizer, Reed Solomon encoder, interleaver and trellis encoder with synchronization signals; and

an antenna transmitting signals corresponding to the switched data packets and synchronization signals.

20. (Original) The system according to claim 19, wherein the enhanced vestigial sideband encoder is implemented within a studio and the standard vestigial sideband modulator is implemented with a transmitter.

21. (Previously Amended) The system of claim 1, wherein the encoded digital information bytes removed from the encoded data packets include encoded digital video data.

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22. (Previously Amended) The method of claim 11, wherein the encoded digital information removed from the encoded data packets includes encoded digital video data.